Title: CONDUCTIVE MATERIAL COMPOSITIONS, APPARATUS, SYSTEMS, AND METHODS

IN THE CLAIMS

Please amend the claims as follows:

- 1. (Currently Amended) A component lead comprising:
- a lead finish comprising between from about 78% to less than and 80% by weight of lead, between about 9% and about 11% by weight of antimony, between greater than 5% and up to about 12% by weight of silver, and a balance of tin disposed over the component lead.
- 2.-3. (Canceled)
- 4. (Currently Amended) The <u>component</u> lead of claim 1, wherein the component lead is to be coupled to a lead of a surface mount component.
- 5. (Currently Amended) The <u>component</u> lead of claim 1, wherein the component lead is coupled to a downhole electronic assembly.
- 6. (Currently Amended) A package structure comprising:
 - a package; and
- a plurality of <u>component</u> leads coupled to a circuit included in the package and having a lead finish comprising between <u>from</u> about 78% to less than and 80% by weight of lead, between about 9% and about 11% by weight of antimony, between greater than 5% and up to about 12% by weight of silver, and a balance of tin.
- 7. (Withdrawn) The package structure of claim 6, wherein the circuit is included in a substrate.
- 8. (Withdrawn) The package structure of claim 7, wherein the package structure is part of a downhole electronic assembly.

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- 9. (Currently Amended) A circuit board, comprising:
 - a processor; and

a circuit coupled to the processor and included in a package structure having a plurality component leads having a lead finish comprising between from about 78% to less than and 80% by weight of lead, between about 9% and about 11% by weight of antimony, between greater than 5% and up to about 12% by weight of silver, and a balance of tin.

- 10. (Withdrawn) The circuit board of claim 9, wherein the circuit includes a memory.
- 11. (Withdrawn) The circuit board of claim 9, wherein the circuit includes a digital-to-analog converter.
- 12. (Currently Amended) A system comprising:

a component lead having a lead finish disposed over the component lead, the second lead finish comprising between from about 78% to less than and 80% by weight of lead, between about 9% and about 11% by weight of antimony, between greater than 5% and up to about 12% by weight of silver, and a balance of tin; and

a downhole transducer coupled to the component lead.

- 13. (Canceled)
- 14. (Previously Presented) The system of claim 12, wherein the downhole transducer is selected from the group consisting of a downhole temperature indicator, a downhole vibration sensor, a pressure sensor, an accelerometer, and a fluxgate.
- 15. (Original) The system of claim 12, wherein the downhole transducer is to measure a subsurface characteristic that is selected from a group consisting of a downhole temperature, a downhole pressure, a resistivity of a subsurface formation, a porosity of a subsurface formation, a diameter of a borehole, and a shape of the borehole.

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- (Currently Amended) The system of claim 12, further comprising: 16. a processor coupled to the component lead.
- (Currently Amended) The system of claim 12, further comprising: 17. an amplifier coupled to the component lead.
- 18. 39. (Canceled).
- 40. (Currently Amended) An assembly comprising:

a downhole transducer coupled to a circuit trace included in a circuit attached to a composition including a first amount between from about 78% to less than and 80% by weight of lead, a second amount between about 9% and about 11% by weight of antimony, a third amount between greater than 5% and up to about 12% by weight of silver, and a balance of tin.

- 41. (Original) The assembly of claim 40, further comprising: a processor to be communicatively coupled to the circuit.
- (Original) The assembly of claim 40, wherein the circuit includes a data acquisition 42. system.
- 43. (Original) The assembly of claim 40, wherein the circuit includes a filter.
- 44. 46. (Canceled)